(12) UK Patent Application (19) GB (11) 2 290 936 (13) A

(43) Date of A Publication 17.01.1996

(21) Application No 9413485.5

(22) Date of Filing 05.07.1994

(51) INT CL[6]
A01K 67/033

(52) UK CL (Edition O )
A1M MFA

(56) Documents Cited
WO 94/19296 A1 WO 93/10060 A1

(58) Field of Search
UK CL (Edition N ) A1M MFA MFH
INT CL[6] A01K 67/033
ONLINE DATABASES:- WPI

(71) Applicant(s)
Garry Clifford Lomas
Old Meadows Farm, Dog Pits Lane, Broadclough, BACUP, Lancs, OL13 8PU, United Kingdom

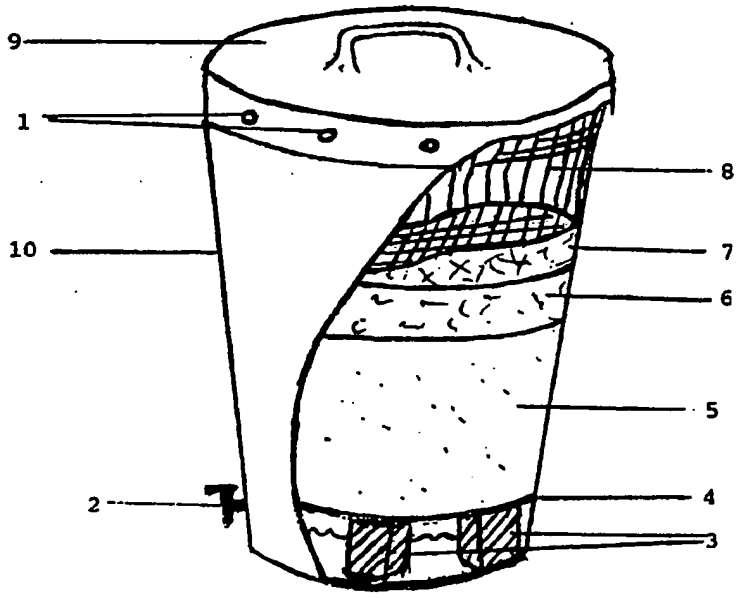
(72) Inventor(s)
Garry Clifford Lomas

(74) Agent and/or Address for Service
Garry Clifford Lomas
Old Meadows Farm, Dog Pits Lane, Broadclough, BACUP, Lancs, OL13 8PU, United Kingdom

# (54) Worm screen

(57) Apparatus is disclosed which enables worms to be separated from residual compost 5, the apparatus comprising a screen 8 of a mesh size suitable to allow worms to pass, but blocking the passage of compost 6/7. The screen is placed into a conventional wormery at a stage shown in Fig 1. The active layer 6 moves up the wormery (Fig 2) as a result of progressive introduction of organic matter, the worms move with this layer. The screen is used to remove the active layer and worms, leaving behind the layer residual compost 5 (Fig 3). The contents of the screen is replaced when the compost 5 has been removed.

FIG 1




GB 2 290 936 A

FIG 1

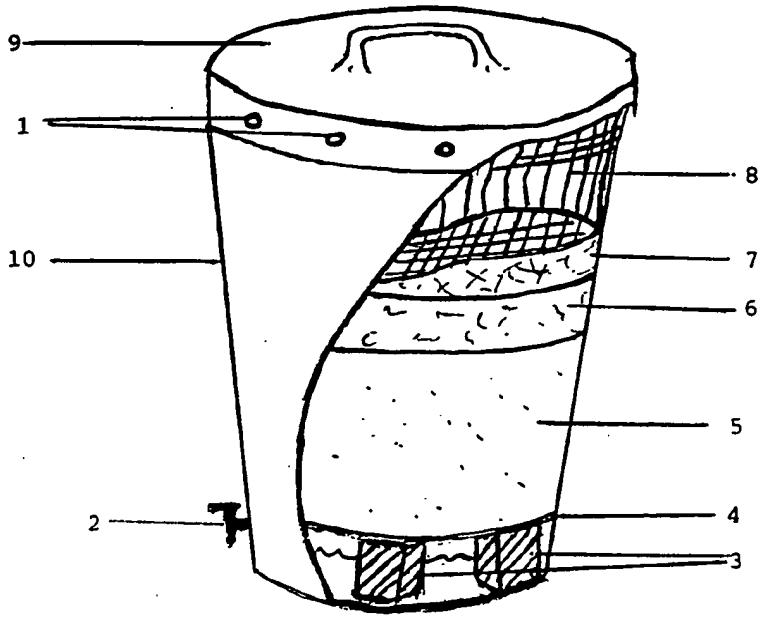



FIG 2

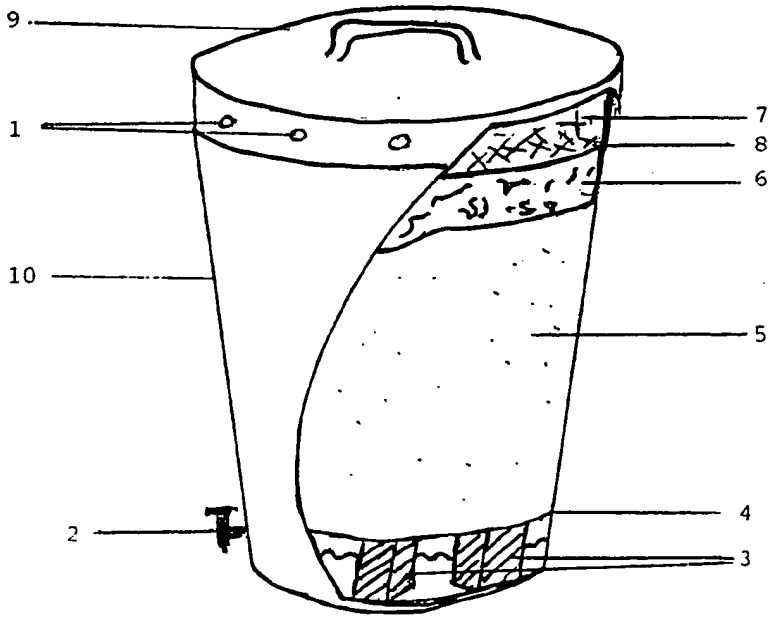
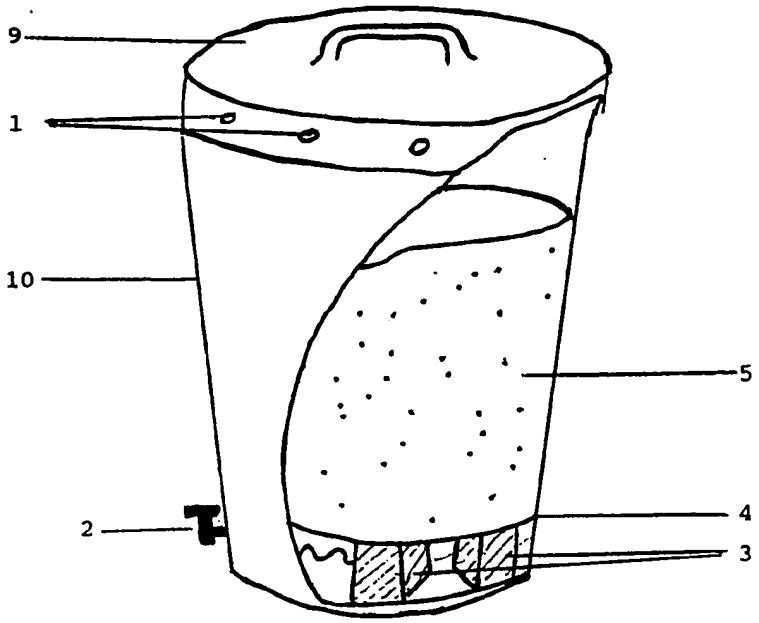


FIG 3



This invention relates to a worm screen.

Wormery's are well known for the recycling of organic wastes, usually those designed for domestic use are the size of a standard dust bin, with many being a modified dust bin as the main container, whilst others use a specific type or design of container. Unless the container facilitates removal of the compost from below the worm layer, then the only way to gain access to the compost is to remove the worm layer first, this is usually a messy and unpleasant task using a hand trowel or similar.

According to the present invention there is provided a worm screen, this can be in the form of a net , the size of the spacings being enough to allow an adult worm through and yet contain any compost and organic waste. The worm screen is inserted into the wormery, then organic waste is placed, progressively, inside this as when in normal use. As the worms move into this layer, they having processed that below, they pass through the spaces in the screen and thus when the screen is removed they are contained within, therefore enabling access to the compost below easily and relatively mess free.

A specific embodiment of the invention will now be described by way of example with reference to the accompanying drawing in which:-

Figure 1 shows, in a cut away view, a typical wormery nearing full stage with the net having just been inserted.

Figure 2 shows , in a cut away view, the wormery full and ready for removal of the worm layer and fresh waste.

Figure 3 shows, in a cut away view, the wormery after having the net , together with the contents, removed from the wormery, giving access to the compost.

Referring to the drawing a typical domestic wormery comprises of, a container 10, with a close fitting lid 9 and vents 1, there is usually a means for collecting the leachate, this is often done using spacers 3 supporting a form mesh or perforated platform 4. The controlled outlet of the liquid is done using a tap 2.

Once the wormery is established, fresh organic waste is added regularly, as the worms feed on this they convert it into compost 5. Composting worms are of species that live close to the surface just below the fresh organic waste 7, and form what is known as the active layer 6. Gradually the wormery becomes filled.

When the level of the compost in the wormery nears the three quarters full stage, or at a point when the compost is to be required in the near future, the worm screen 8 is placed in the wormery as shown in Fig 1. Then as more fresh organic waste is put inside the worm screen the worms move into this through the spacings in the net to feed on it. When sufficient waste has progressively been added to ensure that the worm active layer 6 is completely within the worm screen 8,as shown in Fig 2, the worm screen is removed as shown in Fig 3 and access is gained to the compost 5 below.

Once the compost has been removed the contents of the worm screen are carefully emptied back into the bottom of the wormery and after settling down for a few days is ready for starting the composting process again.

What I claim is :-

1. A worm screen which is in the form of a net ., the size of the spacings being enough to allow an adult worm through and yet contain any compost and organic waste. The worm screen is inserted into the wormery, then organic waste is placed, progressively, inside this as when in normal use. As the worms move into this layer, they having processed that below, they pass through the spaces in the screen and thus when the screen is removed they are contained within, therefore enabling access to the compost below, easily and relatively mess free.

2. A worm screen as described in Claim 1 made from any material either rigid or flexible.

3. A worm screen as claimed in Claim 1 or 2 which provides a means of separatating the active worm layer from the compost.

4. A worm screen as claimed in any preceding claim, which may be used during any stage of filling a wormery.

5. A worm screen substantially as described herein with reference to Figures 1 - 3 of the accompanying drawing.

6. A worm screen as claimed in any preceding claim, which is suitable for any size or shape of domestic wormery.

## Amendments to the claims have been filed as follows

1. A worm screen which is in the form of a net, the size of the spacings being enough to allow an adult worm through and yet contain any compost and organic waste. The worm screen is inserted into the worm bin then organic waste is placed, progressively, inside this as when in normal use. As the worms move into this layer, they having processed that below, they pass through the spaces in the screen and thus when the screen is removed they are contained within, therefore enabling access to the compost below, easily and relatively mess free.

2. A worm screen as described in Claim 1 made from any material either rigid or flexible.

3. A worm screen as claimed in Claim 1 or 2 which provides a means of separating the active worm layer from the compost.

4. A worm screen as claimed in any preceding claim, which may be used during any stage of filling a worm bin.

5. A worm screen substantially as described herein with reference to Figures 1 - 3 of the accompanying drawing.

6. A worm screen as claimed in any preceding claim, which is suitable for any size or shape of domestic worm bin.

| Patents Act 1977<br>Examiner's report to the Comptroller under Section 17<br>(The Search report) | Application number<br>GB 9413485.5 |
|---|---|
| **Relevant Technical Fields**<br><br>(i) UK Cl (Ed.N) A1M (MFA, MFH)<br><br>(ii) Int Cl (Ed.6) A01K 67/033 | Search Examiner<br>R D CAVILL<br><br>Date of completion of Search<br>27 SEPTEMBER 1995 |
| **Databases** (see below)<br>(i) UK Patent Office collections of GB, EP, WO and US patent specifications.<br><br>(ii) ONLINE: WPI | Documents considered relevant following a search in respect of Claims :-<br>1 TO 6 |

**Categories of documents**

| | | | |
|---|---|---|---|
| X: | Document indicating lack of novelty or of inventive step. | P: | Document published on or after the declared priority date but before the filing date of the present application. |
| Y: | Document indicating lack of inventive step if combined with one or more other documents of the same category. | E: | Patent document published on or after, but with priority date earlier than, the filing date of the present application. |
| A: | Document indicating technological background and/or state of the art. | &: | Member of the same patent family; corresponding document. |

| Category | Identity of document and relevant passages | Relevant to claim(s) |
|---|---|---|
| E, X | WO 94/19296 A1 (NATTRASS) see whole document | 1 to 4 |
| X | WO 93/10060 A1 (ROBERTS) see whole document, note Figure 2 | 1 to 4 and 5 |

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).